

7.0 Findings and Recommendations

Reclamation conducted an appraisal-level investigation of the water delivery alternatives and water supply options that were recommended for further analysis by the PASS. This report documents these analyses. The following summarizes the investigation findings and Reclamation's recommendations.

7.1 Findings

Reclamation determined that all water delivery alternatives and water supply options examined are technically feasible. Preliminary cost estimates indicate that alternatives that require constructing major infrastructure are more expensive, but when compared per acre served, all alternatives are within a comparable range of costs. Because these costs estimates are preliminary and entail different costing methods, additional design data and analysis are required to refine the construction costs. Costs associated with OM&R, land acquisition, mitigation, and relocating utilities will also need to be calculated to fully understand the costs associated with implementation of any alternative or option selected for construction. These data will be compiled in the next Study phase. However, the information developed for this investigation does allow general comparisons between alternatives and options.

All alternatives and water supply options examined will have some magnitude of environmental impact. Reclamation will need to collect data and analyses in coordination with State and Federal agencies to identify specific effects and measures to mitigate effects where possible and appropriate.

Reclamation held public information meetings in October 2007, and distributed mailings in October and November 2007, to individuals on its mailing list to present information about the appraisal-level investigation and request comment. Reclamation received 84 written comments from State agencies; environmental, conservation, and non-governmental organizations; State residents; and representatives for agriculture and recreation interests (Table 38).

Those expressing support for the Study predominantly advocated alternatives A and B, with some support for alternative C. Many noted that alternative D, which would rely on the existing CBP canal system, could not deliver a replacement water supply to sufficient acres to address the issues associated with the declining aquifer and would not be able to deliver water to lands south of I-90, an area where significant aquifer decline is occurring. Many suggested that Reclamation examine less expensive alternatives such as water conservation, water measurement, water markets, conversion to dryland farming, and reconstruction of wells, given the significant economic costs associated with constructing the water delivery alternatives. Others noted that construction costs were not significant when considering the current economic benefits of sustaining current agricultural production in the Odessa Subarea.

Most of the comments that were received opposed construction of a Lower Crab Creek reservoir because of concerns about possible impacts to fish, wildlife, recreation, infrastructure, and private property. Many advocated modifying operations at existing CBP reservoirs as the best options to provide a replacement water supply because it would be more cost effective and would result in fewer environmental issues than constructing new dams and reservoirs.

Table 38. Stakeholders providing written comments

| Stakeholder Category | Description | Stakeholders (percent) |
|-------------------------------|---|-------------------------------|
| State government | Washington State agency. | 2 |
| Agriculture | Individual farmers or organizations representing agricultural interests. | 14 |
| Environmental group | Groups advocating on behalf of natural resources. | 7 |
| Non-governmental organization | Groups advocating for a variety of interests. | 1 |
| Recreation | Individual or groups advocating for recreation opportunities such as angling, boating, etc. | 10 |
| Resident | Residents living in the State of Washington and not indicating affiliation with any of the above categories. | 43 |
| Other | Groups or individuals that do not fall within above categories, reside outside the State, or did not provide information to determine appropriate category. | 23 |

However, there are concerns about impacts to recreation and the surrounding local communities from additional draw down of Banks Lake. Appendix D summarizes public feedback.

7.2 Recommendations

Reclamation reviewed the information developed during the appraisal-level investigation and considered public feedback to compare and evaluate the water delivery alternatives and water supply options. Engineering technical feasibility and estimated costs, performance in meeting Study objectives, public comment, and potential environmental and other issues informed the selection of alternatives and options for future investigation. Reclamation has selected water delivery alternative B and water supply options that include modifying operations at Banks Lake and Potholes Reservoir and constructing a Rocky Coulee reservoir for further investigation.

7.2.1 Water Delivery Alternative Selected for Further Study

Reclamation has decided to initiate additional study of water delivery alternative B, which would construct a new East High canal system north of I-90 and expand the capacity of the existing East Low Canal south of I-90 and extend it for 2.3 miles. Alternative B was one of only two alternatives that could deliver a replacement water supply to all or a majority of the groundwater-irrigated acres in the Study area; public feedback cited this as a Study priority. While alternative B involves constructing major new infrastructure (East High canal system), it also relies on existing project infrastructure (an expanded East Low Canal system) to deliver water to about half of the acres. The alternative accommodates study and implementation in a phased manner, with several infrastructure configurations possible. This flexibility could expedite delivery of water to some Study area lands. Public comment advocated alternatives that could be

phased and implemented quickly. Initial cost estimates indicate the cost per acre served is within a comparable range to alternative C, but alternative B would deliver water to 40 percent more acres.

7.2.2 Water Supply Options Selected for Further Study

A combination of water supply options will be required to provide sufficient water to replace groundwater irrigation in the Study area. Reclamation has determined that operational modifications at existing facilities (i.e., Banks Lake and Potholes Reservoir) and construction of a Rocky Coulee dam and reservoir best meet the Study objectives. The majority of public comment supported operational modifications as preferred water supply options because they are less costly and are anticipated to result in fewer environmental impacts compared to construction of new storage facilities.

Reclamation will also continue investigation of a proposed Rocky Coulee dam and reservoir because additional storage may be required to minimize the effects associated with some of the operational modifications proposed (e.g., additional draw down at Banks Lake). Of the three potential storage sites examined, the Rocky Coulee location could improve operational flexibility and reliability within the CBP and is estimated to have lower construction costs than other proposed reservoir sites. The Lower Crab Creek site, while having comparable estimated construction costs per acre-foot provided, does not offer the operational flexibility and efficiency of the proposed Rocky Coulee site. Initial identification of potential environmental issues indicates that the Rocky Coulee site would have less complex issues to address compared to the Dry Coulee and Lower Crab Creek sites.

7.3 Future Actions

Reclamation will initiate additional investigation of water delivery alternative B and water supply options involving Banks Lake drawdown, Banks Lake operational raise, Potholes Reservoir reoperation, and a proposed Rocky Coulee dam and reservoir. Additional data collection and analyses will occur to further develop engineering designs and improve the accuracy of cost estimates. Economic analyses will occur to determine if the alternative and options are economically justified and financially feasible. Reclamation will begin data collection and surveys to determine the presence of fish, wildlife, plants, and cultural resources in areas potentially affected by the selected alternative and options. Additional geologic and hydrologic investigations will occur. Reclamation will continue aquifer monitoring activities that began in 2006.

Reclamation will conduct scoping meetings to initiate compliance with NEPA. These meetings will identify environmental issues and concerns and assist in defining the scope of analyses that Reclamation will conduct to determine environmental effects and possible mitigation. Reclamation will also initiate consultation with Tribal governments, as well as ESA consultation with the FWS and NMFS, as appropriate.

The Odessa Subarea Special Study is scheduled for completion in 2011. A planning report and appropriate NEPA report will be prepared to document the investigation and recommendations. This document will provide supporting information for any requests to Congress for construction funding for any selected alternative or options.

